

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents

Washington, D.C. 20231 on March 1, 2004.


Margaret Efron, Patent Attorney



INFORMATION DISCLOSURE
STATEMENT
Patent Application
Docket No. UF-318X
Serial No. 10/613,963

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit : 2661
Applicant(s) : Sartaj Kumar Sahni, Haibin Lu
Serial No. : 10/613,963
Filed : July 3, 2003
For : Dynamic IP Router Tables Using Highest-Priority Matching
Conf. No. : 6767.

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§1.97 AND 1.98

Sir:

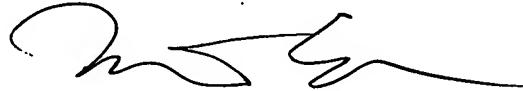
In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. A copy of each cited reference is enclosed.

This information is being submitted subsequent to the later of three months after the filing date of the present application or the mailing of the first Office Action on the merits, but before the mailing of a final action or the notice of allowance. Please charge the fee of \$180.00 to Deposit Account No. 19-0065.

It is respectfully requested that the references cited on the attached form PTO/SB/08 be considered in the examination of the subject application and that their consideration be made of record.

The applicant respectfully asserts that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



Margaret Efron
Patent Attorney
Registration No. 47,545
Phone No.: 352-375-8100
Address : 2421 N.W. 41st Street, Suite A-1
Gainesville, FL 32606-6669

MHE/la

Enclosure: Form PTO-1449



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

+

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	1	of	3	Application Number	10/613,963
				Filing Date	July 3, 2003
				First Named Inventor	Sartaj Kumar Sahni
				Art Unit	2661
				Examiner Name	
				Attorney Docket Number	UF-318X

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	US 4,251, 861	02-17-1981	Mago	
	U2	US 4,833, 468	05-23-1989	Larson et al.	
	U3	US 5,555,405	09-10-1996	Griesmer et al.	
	U4	US 5,701,467	12-23-1997	Freeston	
	U5	US 5,787,430	07-28-1998	Doeringer et al.	
	U6	US 5,909,440	06-01-1999	Ferguson et al.	
	U7	US 6,018, 524	01-25-2000	Turner et al.	
	U8	US 6,021,131	02-01-2000	Even	
	U9	US 6,041,053	03-21-2000	Douceur et al.	
	U10	US 6,061,712	05-09-2000	Tzeng	
	U11	US 6,092,072	07-18-2000	Guha et al.	
	U12	US 6,157,955	12-05-2000	Narad et al.	
	U13	US 6,212,184	04-03-2001	Venkatachary et al.	
	U14	US 6,289,013	09-11-2001	Lakshman et al.	
	U15	US 6,335,932	01-01-2002	Kadambi et al.	
	U16	US 6,341,130	01-22-2002	Lakshman et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	F1				T ⁶
	F2				

Examiner Signature		Date Considered
--------------------	--	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard T.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	2	of	3	Application Number	10/613,963
				Filing Date	July 3, 2003
				First Named Inventor	Sartaj Kumar Sahni
				Group Art Unit	2661
				Examiner Name	
				Attorney Docket Number	UF-318X

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	R1	DEGERMARK, MIKAEL, et al. (1997) "Small Forwarding Tables for Fast Routing Lookups" <i>ACM SIGCOMM, Proceedings of the ACM SIGCOMM '97 conference on Applications, technologies, architectures, and protocols for computer communication.</i> pages 3-14.
	R2	DOERINGER, W., G. KARJOTH, and M. NASSEHI (1996) "Routing on longest-matching prefixes" <i>IEEE/ACM Transactions on Networking</i> , 4(1): pages 86-87.
	R3	ERGUN, FUNDA, et al. (2001) "A Dynamic Lookup Scheme for Bursty Access Patterns" <i>Proceedings of IEEE INFOCOM</i> pages 1-10.
	R4	GUPTA, P. and N. MCKEOWN (2000) "Dynamic algorithms with worst-case performance for packet classification" <i>IFIP Networking</i> pages 528-539.
	R5	LAMPSON, BUTLER, VENKATACHARY SRINIVASAN, and GEORGE VARGHESE (June 1999) "IP Lookups Using Multiway and Multicolumn Search" <i>IEEE/ACM Transactions on Networking Vol. 7, No. 3</i> , pages 324-334
	R6	LU, H. and SAHNI, S. (2003) "O (log n) dynamic router-tables for prefixes and ranges" <i>IEEE Symposium on Computers and Communications</i> , pages 1-42
	R7	NILSSON, STEFAN and GUNNAR KARLSSON (1998) "Fast address lookup for Internet routers" <i>Proceedings of IEEE Broadband Communications</i> (enclosed copy pages numbered 9-18).
	R8	RUIZ-SANCHEZ, M., E. BIERSACK, and W. DABBOUS (Mar/Apr 2001) "Survey and taxonomy of IP address lookup algorithms" <i>IEEE Network</i> , 15(2): pages 8-23.
	R9	SAHNI, SARTAJ and KUN SUK KIM "Data Structures of IP Lookup with Bursty Access Patterns" www.cise.ufl.edu/~sahni (enclosed copy pages numbered 1-5)
	R10	SAHNI, SARTAJ and KUN SUK KIM (2001) "Efficient Construction of Fixed-Stride Multibit Tries for IP Lookup" <i>Proceedings of 8th IEEE Workshop on Future Trends of Distributed Computing Systems</i> pages 178-184 (enclosed copy pages numbered 1-7).

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Approved for use through 07/31/2006. OMB 0651-0031U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<p>Substitute for form 1449B/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				Complete if Known	
Sheet	3	of	3	Application Number	10/613,963
				Filing Date	July 3, 2003
				First Named Inventor	Sartaj Kumar Sahni
				Group Art Unit	2661
				Examiner Name	
				Attorney Docket Number	UF-318X

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	R11	SAHNI, SARTAJ and KUN SUK KIM (2002) "Efficient Construction of Variable-Stride Multibit Tries for IP Lookup" <i>Proceedings of IEEE Symposium on Applications and the Internet (SAINT)</i> pages 220-229 (enclosed copy pages numbered 1-8).	
	R12	SAHNI, SARTAJ and KUN SUK KIM (July 2002) "O(log n) Dynamic Packet Routing" <i>7th IEEE Symposium on Computers and Communications</i> . Pages 1-29	
	R13	SAHNI, SARTAJ, KUN SUK KIM, and HAIBIN LU (May 2002) "Data Structures for One-Dimensional Packet Classification Using Most-Specific-Rule Matching" <i>International Symposium on Parallel Architectures, Algorithms, and Networks (ISPAN)</i> pages 3-14 (enclosed copy pages numbered 1-12).	
	R14	SKLOWER, KEITH (1991) "A Tree-Based Packet Routing Table for Berkeley Unix" <i>Proceedings of 1991 Winter USENIX Conference</i> pages 93-99 (enclosed copy pages numbered 1-4).	
	R15	SRINIVASAN, V. and G. VARGHESE (Feb. 1999) "Faster IP Lookups Using Controlled Prefix Expansion" <i>ACM Transactions on Computer Systems</i> Vol.17, issue 1, pages 1-40 (enclosed copy pages numbered 1-21).	
	R16	SURI, S., G. VARGHESE, and P. WARKHED (2001) "Multiway range trees: Scalable IP lookup with fast updates" <i>Proceedings of Globecom '01</i> .	
	R17	WALDVOGEL, MARCEL et al. (1997) "Scalable High Speed IP Routing Lookups" <i>Proceedings of the ACM SIGCOMM '97 Conference on Applications, technologies, architectures, and protocols for computer communication</i> . pages 25-36 (enclosed copy pages numbered 1-12).	
	R18		
	R19		
	R20		
	R21		
	R22		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. his collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.